adjacent the chamber. In this configuration, no seals are needed for the thermocouple, yet it provides an accurate reading of the internal sample and microreactor temperature.

[0026] The microreactor chamber 37 can be heated or cooled by any means known in the art. In one advantageous embodiment, the microreactor chamber 37 is heated using a heater like that shown in FIG. 6. The heater 70 comprises a heat-conducting body 72 with a well 74 for closely holding the assembled microreactor 10 so that the frame of the assembled microreactor is in thermal contact with the heater body 72. In a presently preferred embodiment, the heater body 72 is made of brass. Heating elements known in the art (not shown) are disposed within heating element cavities 73 the body 72. The heater 70 includes an opening 76 for inserting the microreactor 10 into the heater well 74. The heater opening 76 and an opposing opening 77 expose the observation openings 39, 41 and windows 30a, 30b of the microreactor assembly 10 to allow for transmission of a probe beam through the chamber 37. The heater body 72 also includes thermocouple passageways 78 located to align with the thermocouple well 62 of the microreactor assembly 10 to allow for insertion of a thermocouple into the microreactor core 12 when the microreactor assembly 10 is resting in the heater well 74. The thermocouple passageways 78 are symmetrically ~~symetrically~~ located so that this insertion can be achieved regardless ~~regardliss~~ of which orientation the microreactor assembly 10 is placed into the heater well 74.

In the Claims

Please enter the amendment of claims as set forth below. All of the claims that were and are in the application are set forth in a single version indicating the status of each of the claims, presenting the currently amended claims with markings to show changes that have been made and presenting the text of claims not being amended or being added without any markings: